Live Stock and Dairy

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Inquiries of Progressive Farmer readers cheerfully answered.

FEEDING AND MANAGEMENT OF LIVE STOCK.

IV.—Some Common Feeding Terms Explained

There are just a few other terms that are used in feeding that I want to speak of here, because in the articles that will follow they will be used often. One of these terms is the "nutritive ratio." This simply refers to the proportion of the digestible protein to the digestible carbo-hydrates and that in a feeding stuff. In other words, it is simply a term to express the relation that the "muscle makers" of the food-stuffs bear to the "heat and fat producing materials." Thus we say that the nutritive ratio of timothy hay is 1 to 16. That means that for every pound of digestible protein in timothy hay there are sixteen pounds of digestible carbo-hydrates and fat. Likewise bran has a nutritive ratio of 1 to 4. That means that there is one pound of the "muscle formers" to the four pounds of "heat and fat producers." Bran, therefore, is "narrow," relatively speaking, and timothy hay is "wide."

We sometimes hear the term "feeding standard" used in the discussion of feeding rations. "Feeding standard" is simply a guide that suggests the quantity of protein, carbo-hydrates, and fat that an animal needs daily for doing any specific work. All of these terms are not meant to confuse the farmer and feeder, but to help him in making a better success in his feeding operations. If each person who feeds his live stock knew the simple principles involved in feeding animals so that he might practice them, it would mean that the feeding of the animals that we now have, on the same feeding stuffs that we now raise, the produtcion of a good many million pounds of beef and pork. I believe it possible by the rational method of feeding to take precisely the kinds and amount of feeding stuffs we now have in the State, and without any additional feeding materials we could feed a god many thousand extra animals every year. We would do this by utilizing the ingredients in our feeding stuffs that are now wasted because the animal cannot make use of the feeding materials unless they are given in the proper proportion and in the requisite quantity. We are wasting much of the protein in our cottonseed meal because we oft-times feed too much of it. If we could feed this wasted protein in connection with the wasted corn stover in the fields, we could, by this item alone, feed a good many thousand of cattle in our State. After all, the proper feeding of animals is not a difficult problem. It simply involves some knowledge of the business, and some skill in the execution. There is no field in the State that has greater enducements for more profitable results for the young men than beginning now to make a study of the rational feeding of our live stock.

C. W. BURKETT.

The bodies of animals dying of contagious diseases are a menace to the health of other animals, and even in some cases to that of man, if allowed to lie exposed above ground; and it has been found that in the case of certain virulent diseases, like anthrax, ordinary burying is not an entirely effective safeguard. The germs of such diseases retain their virulence for many years, even in the soil, and are thus a constant source of danger. Of course if the diseased bodies are left above ground or thrown into a ditch or stream, the danger of disseminating the disease is increased many fold. The most effective means that have been found for disposing of such diseased bodies are deep burying with use of lime and burning.

Dressed Poultry for Market.

Editors Progressive Farmer:

One of the much-debated questions among poultry dealers and consumers is whether or not birds keep better when marketed drawn (i. e., with internal organs removed) or undrawn. Practice varies in different localities. Opening the body and removing the viscera undoubtedly exposes the internal surface to the air, which always contains micro-organisms, and thus invites decomposition; but, on the other hand, it must be remembered that the viscera decompose more rapidly than any other parts of the body, and if left in are likely to infect the rest of the bird. Of course in removing them great care and cleanliness should be observed. Washing the inside of a badly drawn bird with salt water is said to hinder infection. In experiments reported a few years ago, properly drawn birds kept sweet two or three days longer than undrawn ones. In the case of undrawn birds the digestive organs contain more or less moist, partly digested material. The liquid in such matter can pass through the walls of the intestines, etc., and it is thus possible that dissolved bodies of unpleasant flavor can find their way into the adjacent flesh and that the flavor of undrawn poultry which is kept for any considerable time may be injured.

W. H. TODD.

Meat on the Farm.

Editors Progressive Farmer:

"Meat on the Farm" is the title of Farmers' Bulletin 183, written by Andrew Boss of the University of Minnesota for publication by the Bureau of Animal Industry. Mr. Boss is said to be a high authority on the subject. The bulletin contains a good hour's or more reading, but appears interesting and instructive throughout, as well to the farmer who has a couple of shoats as for the big grower.

In the selection of animals for meat, it is stated, that health should be given first consideration. Fat animals are not always healthy. Nor can first-class meat be obtained from animals poor in flesh. "Never kill an animal that is loosing flesh," is the maxim followed by butchers. With failing flesh, the muscle fibers are shrinking in volume and contain correspondingly less water so that the meat is tough and dry. A better product will be obtained from an animal in medium flesh but gaining rapidly than from the over-fat animal at a stand-still.

Fine bones, soft, luxuriant hair and mellow flesh are always desirable in an animal to be used for meat, as they are indications of small waste and good quality of meat.

The flesh of very young animals frequently lacks flavor and is watery. An old animal properly fattened and in good health would be preferable to a young one in poor condition.

The best meat will be obtained from cattle from thirty to forty months old.

A calf should not be used for veal under six weeks of age; is best about ten weeks old and raised on the cow.

Hogs may be used at any age after six weeks, but the most profitable age is eight to twelve months.

Sheep may be used from two to three months old; they will be at their best before two years old, usually at eight to twelve months.

In the preparation of animals for slaughter it is important that they should be kept off feed for at least twenty-four hours. Otherwise the system is gorged and it is impossible to thoroughly drain the blood from the animal, resulting in a reddish colored, unattractive carcass. Food in the stomach also affects the carcass, where the dressing is slow. Water, however, should be given freely up to the time of slaughter.

The treatment of animals previous to slaughter is an important thing, especially that they be not excited. Excitement prevents proper drainage of blood vessels, and if extreme will cause souring of the meat very soon after dressing. Never kill an animal immediately after a long drive or a run. Bruises should of course be avoided.

Mr. Boss goes into specific detailed description and instruction regarding the killing and dressing of the various farm animals, including the tools and apparatus necessary. Cattle, hogs, sheep and poultry are all treated of, and the handling of the hides and pelts. Then comes a description of the cutting up of the meats, and again the keeping of fresh meat such as cold storage, freezing, snow packing, and partial cooking. Under "Curing Meats," he discusses the various preservatives in common use, wet and dry curing, corning, sugar curing, methods of making head cheese, scrapple, pickling pigs' feet, making sausage, hamburg steak, bologna sausage, etc. The smokehouse is likewise described.

GUY E. MITCHELL.

Washington, D. C.

How Good Stock Pays.

The average farmer and stock-raiser will say that he cannot afford to buy high-priced bulls. I know a man who bought a pure-bred bull—a good one—and in the first crop of calves there were fifty steers. These steers were out of native cows that cost the owner from seven to ten dollars per head. The steers, at an average age of eighteen months, were sold to a feeder for $19.50 per head. In the same lot the feeder had several scrub steers of about the same age and size that had been bought for $10.50 per head. I asked the feeder if he considered the better-bred steers worth $9 per head more than the scrubs, and he replied that he did. If that be true, the good blood in the bull was worth $450 in his first crop of calves.

Ordinarily, I do not think there is so great difference, but as near as I could get at the facts from data collected at St. Louis stock yards, there is really a difference in favor of the better-bred steer of from 40 cents to 60 cents per hundred, or $4 to $6 per thousand pounds. Let us do away with the erroneous idea that it is economy to buy an inferior bull because he is cheap. Such animals are never cheap, and to-day good young pure-bred bulls can be had for from $100 to $250, and they will pay their purchase price in the increased value of their first crop of calves.—E. R. Lloyd, Mississippi Experiment Station.

It is humiliating to think of the number of boys on farms in all parts of the country who have never thought that a knowledge of scientific farming would benefit them in the least. They vainly imagine that having been born on a farm, and learned how to harness horses and hitch them to a plow or wagon, and haul and plow like other people, that they naturally know how to farm. There is no one so ignorant as he who is ignorant of his ignorance.—Farm and Ranch.

A great character, founded on the living rock of principle, is, in fact, not a solitary phenomenon, to be at once perceived, limited and described. It is a dispensation of Providence, designed to have not merely an immediate, but a continuous, progressive and never-ending agency. It survives the man who possessed it; survives his age,—perhaps his country, his language.—Edward Everett.

Looking forward beyond my stay on earth I see our country become richer and more powerful. But to make her prosperity more than superficial her moral and intellectual development should keep pace with her material growth.—George Peabody; inscription in Hall of Fame, New York.

Prof. Henry Jerome Stockard, of Raleigh, is engaged on a book entitled, "A Study of Southern Poetry."